

August 26, 2014

**STATE OF NEW HAMPSHIRE  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF HIGHWAY DESIGN**

**CONFERENCE REPORT**

**PROJECT:** ROXBURY-SULLIVAN  
F-X-0121(034)  
10439  
NH 9, Bridge over Otter Brook & 2 Miles Roadway Improvements

**DATE OF CONFERENCE:** August 5, 2014

**LOCATION OF CONFERENCE:** Sullivan Town Hall

**ATTENDED BY:** **NHDOT**  
Don Lyford      Marc Laurin  
John Butler      Steven Babalis  
John Kallfelz

**OTHERS**  
See attached sign-in sheet.

**SUBJECT:** Public Officials/Public Informational Meeting

**NOTES ON CONFERENCE:**

Don Lyford opened the meeting with a brief review of the project's history. The last public informational was held in April of 2014. A formal public hearing is anticipated in the fall of 2014. The amount of funding currently allocated to this project is not adequate to fully reconstruct the entire segment, so the Department is trying to prioritize the areas of greatest need so that portions can be built as funding becomes available.

John Butler described the design details of the project. The project area along NH Route 9 is approximately 2 miles long and runs roughly from the Centre Street intersection in East Sullivan westerly to the Houghton Ledge Road intersection/Granite Gorge ski area in Roxbury. It was explained that the overall project area has been divided into three sub-project areas, and ranked by priority:

1. Otter Brook bridge replacement
2. Retaining wall area near Houghton Ledge Road

3. Roadway reconstruction between the first two areas, including Hubbard Brook bridge rehabilitation

### **Otter Brook bridge replacement:**

Several bridge replacement alternatives have been considered, such as constructing the new bridge upstream or downstream of the existing bridge, or constructing a temporary bridge to maintain traffic on while a new bridge is constructed in the same location as the existing bridge.

At the April public informational meeting, all these bridge replacement alternatives were presented, and it was communicated that the Department's preferred alternative was the upstream option. Relocating the bridge upstream would result in a sizable cost savings, improved stream crossing, and improved alignment for Route 9. It would require the acquisition of the Turner/Hudson property, including the removal of the house, and it would move Route 9 into the historic district. Estimated construction cost is \$3.0 million. There was little local support for this alternative at the April meeting due to its impacts to the community.

There was strong support for the online alternative which proposes constructing the new bridge along a similar alignment as to the existing. Valley Road would match into NH 9 just west of the proposed bridge, similar to its current configuration. The proposed bridge would need to be raised approximately 6 feet to pass the 100 year storm. To reduce impacts to the Turner / Hudson parcel, a U back wing wall would be utilized up to Valley Road. The shared drive for the Henault and Patnode parcel would be relocated approximately 75' east.

The Department had initially envisioned to construct the online alternative utilizing a temporary diversion (detour) constructed just upstream of the existing bridge. The complexity of construction and the extra time needed to construct the diversion and temporary bridge would result in a multiple season construction duration. The online alternative with temporary bridge had an estimated construction cost of \$6.2 million. The higher cost when compared to the upstream alternative is due to the construction cost of the diversion, temporary bridge, and the larger permanent bridge.

Following the public informational meeting, the Department investigated ways to reduce the construction cost of the online alternative, primarily the temporary traffic control. The Department felt that routing NH 9 traffic onto Valley Road and Centre Street as a temporary detour was a reasonable compromise. The detour would require temporary widening of the NH 9 / Centre Street and Valley Road / Centre Street intersections and temporary realigning the NH 9 / Valley Road intersection. Tractor trailer trucks would not be able to negotiate the turns at the Valley Road/Centre Street intersection without encroaching temporarily into the opposing lane, therefore, a truck detour would be implemented likely routing tractor trailers along NH 101 and US 202 through Peterborough. Using Valley Road and Centre Street as a detour would reduce the construction cost of the bridge replacement to approximately \$5.0 million. The goal would be to construct the new bridge in one construction season, however, more details of the proposed bridge design need to be developed before the construction duration can be determined.

### **Retaining Wall Area:**

There is a loose boulder retaining wall approximately 1000 feet easterly of the Houghton Ledge Road intersection. Two alternatives were presented at the April public informational meeting; engineered slope cut, and a new retaining wall. It was communicated at the previous meeting that the retaining wall alternative was the Department's preferred option, but due to the decision to move forward with the more expensive bridge replacement alternative, the Department now prefers the engineered slope cut for its lower construction cost.

The engineered slope cut alternative would remove the retaining wall and construct a steep cut slope into the hillside. The engineered slope would be approximately 60 feet high, and would require the relocation of about 300 feet of Houghton Ledge Road at the top of the slope. Estimated construction cost is approximately \$1,000,000. Generally, two-way traffic would be maintained during construction by temporarily widening NH 9 toward the river.

### **Route 9 Roadway Reconstruction:**

The existing NH 9 roadway was last reconstructed in the 1930s. The structural composition of the roadway base is relatively poor, making the pavement susceptible to frost heaving and deterioration. Ideally, the roadway should be completely reconstructed; however, the cost of doing so would be beyond the scope of the project funding. Pavement reconstruction options are still being explored, but it is currently assumed that some form of pavement reclamation process will be done. It is envisioned that the existing alignment and profile of NH 9 will be retained to the west of the bridge replacement sub-project, and that a modest pavement widening to achieve 4 foot wide paved shoulders will be done. Estimated cost to do pavement reclamation for the full project length to the west of the bridge sub-project is \$1,700,000.

### **Hubbard Brook Bridge:**

The NH 9 bridge over Hubbard Brook in Roxbury is in relatively good condition overall, but is in need of a deck replacement. The bridge is only a 14 foot long span, so the deck replacement could likely be done with prefabricated panels to expedite the construction time and minimize traffic disruptions. Estimated construction cost is \$50,000.

Marc Laurin discussed the environmental resources and issues associated with the project. Existing natural resources include Otter Brook and its associated floodplain, Hubbard Brook, wetlands, endangered or rare plants and animals, conservation lands, and water quality. Cultural resources include an historic district in East Sullivan, and other potential archaeologically-sensitive sites. Marc explained that upon further review, the boundaries of the historic district have been expanded to include properties on the south side of NH 9. Marc described the process to become a Consulting Party to the historic review process as defined in Section 106 of the National Historic Preservation Act. Becoming a Consulting Party gives owners of historic properties directly affected by the project or agencies that possess a direct interest in the historical resources an opportunity to become more involved in an advisory role.

Don Lyford concluded the presentation by stating that there is currently \$6,000,000 allocated for construction of this project.

Questions & Comments:

The on-line bridge replacement alternative with the Valley Road detour was generally felt to be a reasonable compromise solution by those in attendance.

Question: A resident inquired if the project's public hearing would take place in Sullivan.

Response: Don Lyford responded that it is likely the hearing will take place in Sullivan if a location is found that is suitable to the hearing's particular requirements.

Question: A resident inquired as to how much truck traffic would divert and use the truck detour. He expressed concern that trucks that do not divert will have difficulty maneuvering through the detour, especially pre-manufactured homes on trailers.

Response: Don responded that it is uncertain the amount of truck traffic will continue to use NH 9 during construction. As for the tractor trailers that are transporting pre-manufactured homes; they will have to use the truck detour as part of their heavy load permit. Don noted that for the occasional truck that does use Valley Road, there is sufficient room for the truck to maneuver through the detour, but will encroach into the opposing lane. A resident added that during the road washout that occurred during the flooding, tractor trailers were able to maneuver fine through Valley Road and Centre Street.

Question: A resident inquired if temporary signals were investigated for alternating one-way traffic, thus removing the tractor trailer problem of them using both lanes through the Valley Road detour.

Response: Don responded that alternating one-way traffic control was investigated. Considering the alternatives, it was concluded that maintaining two-way traffic on the detour was the appropriate traffic control. The vast majority of traffic can negotiate the detour route without issue.

Question: A resident inquired whether it was possible to construct the new bridge in phases while maintaining one direction of traffic on the existing bridge.

Response: Don responded that it was not possible to remove part of the existing bridge width due to the type of bridge and poor condition of the bridge. Also it would be physically difficult since the new bridge is being constructed substantially higher than the existing bridge.

Comment: A resident noted that by maintaining traffic on the detour, the project duration would be shorter since the bridge would not need to be constructed in phases.

Question: A resident inquired if the Sullivan Country Store's septic system would be impacted.

Response: Don responded that it should not be impacted.

Question: A resident inquired if the new bridge will be wider than the existing.

Response: Don responded that it will be wider with a total roadway width of 40'.

Question: J. B. Mack of Southwest Regional Planning Board inquired if any additional project funding had been obtained for the remainder of the overall project.

Response: Don responded that no additional funding has been procured.

Question: A resident of the home at 122 Route 9 inquired if his driveway was to be relocated with this project.

Response: John Butler responded that the driveway will be relocated approximately 75 feet east to improve the sight distance. The resident agreed that this was a good idea.

Question: James Turner inquired if the detour will increase emergency vehicle response time.

Response: Don responded the detour's effect will be negligible.

Question: A resident inquired if the speed limit will be down posted for the detour.

Response: Don responded that the sign package will be developed later in the project. The detour will be posted appropriately.

Question: A resident inquired if a barrier will be installed at the top of the retaining wall by Valley Road to prevent vehicles from going over it.

Response: Don responded that it is envisioned to have a barrier along the top of the wall.

Question: A resident asked if more information will be available at the hearing.

Response: Don responded that the environmental document will be completed by then and posted on the web site. Additionally, the some more information about the bridge may be available.

Question: A resident inquired as to the traffic control for the removal of the Roxbury retaining wall.

Response: Don responded that two-way traffic will generally be maintained, with possible short-term one-way alternating traffic.

Submitted by:

Steven J. Babalis, PE  
Preliminary Design

Noted by: J. Butler

cc: W. Cass                      J. Kallfelz  
    W. Oldenburg                M. Laurin  
    D. Lyford                     M. Dugas  
    B. Saffian                    T. Cleary  
    S. Babalis  
    Roxbury Selectmen  
    Sullivan Selectmen

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## MEETING ATTENDANCE

**PROJECT** Roxbury Sullivan 10439 - NH Route 9 bridge over Otter Brook & 2 miles of roadway improvements

**LOCATION** Sullivan Town Hall, Public Informational Meeting

**PROJECT NO.** F-X-012-1(34) 10439

Federal State

Name	Agency or Address	Comments
Henry Underwood	SWRPC	
J. B. Mack	SWRPC	
Chris Pratt	Sullivan Town Archives	
William Robinson	55 HUBBARD RD SULLIVAN	
Randy & Sheila Smith	Ferry Brook Rd Sullivan	
Cindy & Steve Sinautt	Centre St Sullivan	
Rebecca Sinautt	122 RT 9	
Marcus Sinautt	122 RT 9	
Hal Goodnow	432 VALLEY RD.	
JoAnn Lincoln	436 VALLEY RD	
Jessica Nichols	Centre St., Sullivan	
Kathleen Love	19 CENTRE ST. SULLIVAN	
Rebecca Love	19 Centre Sullivan	
TRICIA PATNODE	68 Apple Hill Rd Sullivan	
GARY PATNODE	68 APPLE HILL RD SULLIVAN	
BECKY CUMMINGS	780 CENTRE SULLIVAN	
Laura Merrifield	Board of Selectmen	
Thomas P. Pinard	426 Valley Rd	
Anne Seidenberg	426 Valley Rd.	
Timothy Turner	439 Valley Rd.	
Robert Bourassa	315 Centre St, Sull.	
Jeff Roudreau	312 Centre St Sull.	
Thomas Scherpa	71 Valley Rd.	
Mark Paquette	19 Wilson Rd	
John Little	40 RT 9	
Mike Cox	311 MOORE HILL RD, NELSON	
TODD BERGERON	168 VALLEY RD SULLIVAN	

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Name	Agency or Address	Comments
Eric White + Debrah	Monnat White 118 Old Concord Rd, Sullivan	
BOB SWITZER	CENTRE ST. SULLIVAN	
BJ Wahl	" " "	
Dan+Nance (Connor) Dets	Connor Dr	